

## WHAT IS CLAIMED IS

1. A shadow mask formed from a plate member comprising an outer frame portion, a body portion of a shadow mask having an outer peripheral line formed through an etching process and a plurality of connection portions through which the body portion of the shadow mask is supported by the outer frame portion, the shadow mask being formed by removing the outer frame portion from the body portion of the shadow mask, wherein a break portion is formed to the shadow mask by removing the outer frame so as to be recessed inward from the outer peripheral line of the shadow mask.

2. A shadow mask according to claim 1, wherein said break portion is formed by applying a half-etching process to a predetermined portion of the body portion of the shadow mask.

3. A shadow mask according to claim 1, wherein said break portion is formed through one of breaking processes at least including a folding process, a tensioning process and a tearing process.

4. A shadow mask according to claim 1, wherein said break portion has an end portion formed to be recessed inward from the outer peripheral line with a distance being set within a range from 10 to 100  $\mu$  m.

5. A plate member for a shadow mask comprising:

a shadow mask having an outer peripheral line providing an outline thereof, said outer peripheral line being formed through an etching process;

an outer frame portion for supporting the shadow mask;

a plurality of connection portions through which the shadow mask is supported by the outer frame portion; and

a portion to be broken formed on a shadow mask side at a portion inside the outer peripheral line of the shadow mask.

6. A plate member according to claim 5, wherein said portion to be broken is arranged so as to be opposed to the connection portion.

7. A plate member according to claim 6, wherein said portion to be broken has a predetermined length in a direction along the outer peripheral line, said predetermined length of the portion to be broken being substantially the same as that of the opposed connection portion in the direction along the outer peripheral line.

8. A plate member according to claim 5, wherein said portion to be broken is subjected to a half-etching process.

9. A plate member according to claim 8, wherein said portion to be broken is formed with an intermediate portion having a substantially concave shape.

10. A plate member according to claim 8, wherein said portion

subjected to the half-etching process has a width in a direction orthogonal to the direction of the outer peripheral line, and a center line of the width is located inside the outer peripheral line so that a distance between the outer peripheral line and the center line is longer than 25  $\mu$  m and not more than 100  $\mu$  m.

11. A plate member according to claim 5, wherein said portion to be broken is a portion forming a break portion of the shadow mask from which the outer frame portion is removed.

12. A method of manufacturing a shadow mask comprising the steps of:  
preparing a plate member comprising a shadow mask having an outer peripheral line formed through an etching process, an outer frame portion for supporting the shadow mask, a plurality of connection portions through which the shadow mask is supported by the outer frame portion, and a portion to be broken formed on a shadow mask side at a portion inside the outer peripheral line of the shadow mask;

removing the outer frame portion from the plate member through one of the breaking processes at least including a folding process, a tensioning process and a tearing process which is applied to the portion to be broken.

13. A method of manufacturing a shadow mask according to claim 12, wherein said plate member is produced from a metallic thin plate by effecting an etching process thereto.